

CONTRACT CHANGE ORDER MEMORANDUM

DATE: 4/22/2014 Page 1 of 2

TO: Tony Anziano, Program Manager /			FILE: E.A. 04 - 0120F4	
FROM: Darryl Schram, Senior TE			CO-RTE-PM SF-80-13.2/13.9	
			FED. NO. No	
CCO#: 369	SUPPLEMENT#: 0	Category Code: CHXX	CONTINGENCY BALANCE (incl. this change) \$21,987,718.42	
COST: \$900,000.00 INCREASE <input checked="" type="checkbox"/> DECREASE <input type="checkbox"/>			HEADQUARTERS APPROVAL REQUIRED? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
SUPPLEMENTAL FUNDS PROVIDED: \$0.00			IS THIS REQUEST IN ACCORDANCE WITH ENVIRONMENTAL DOCUMENTS? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
CCO DESCRIPTION: Type 2 Suspender Cable Tests			PROJECT DESCRIPTION: CONSTRUCT SELF-ANCHORED SUSPENSION BRIDGE	
Original Contract Time: 2490 Day(s)	Time Adj. This Change: DEF Day(s)	Previously Approved CCO Time Adjustments: 501 Day(s)	Percentage Time Adjusted: (including this change) 20 %	Total # of Unreconciled Deferred Time CCO(s): (including this change) 33

THIS CHANGE ORDER PROVIDES FOR:

As directed by the Engineer, perform fatigue testing on suspender rope samples and provide a test procedure for Engineer approval.

Contract Change Order (CCO) 361 "Type 2 Suspender Cable Samples" provided suspender rope test samples for the purposes of performing fatigue testing. This change order (CCO 369) will perform fatigue testing on the samples to investigate the potential long-term effect on service life of Type 2 suspenders from broken wires or indentations of the suspender ropes. Special Provisions Section 10-1.60 "Cable System" does not require fatigue testing.

The suspender cables were fabricated and installed per Special Provisions Section 10-1.60 "Cable System"; however during suspender painting operations it was discovered that four of the installed Type 2 suspender ropes had a total of five broken wires (1 rope with 2 broken wires at East Panel Point (PP) 36 and 3 ropes with 1 broken wire at West PP 38, East PP 40, and East PP 46). Metallurgical testing determined that the broken wires had sustained mechanical damage at or near the fractures. Prestretching of the cables at the fabricator's facility, as required by Special Provisions Section 10-1.60, is suspected to have caused the wire damage/impressions and fractures. Testing and investigation performed at the fabrication facility determined that the instrument used to grip the ropes during prestretching operations created deformations on the wires causing five individual wires to fracture. The prestretching procedure was approved in Submittal 1221 "Wire Rope Prestretching Procedures" and the use of grips is common practice in cable fabrication.

The fabricator, at their own expense, and at the direction of the engineer, performed ultimate tensile tests on cable samples and individual wires containing these contact points. All met or exceeded the performance criteria of the Contract.

The Department estimates an additional cost of \$900,000.00 extra work at force account for this change, which can be financed from the contingency fund. A detailed cost analysis is on file.

Consideration of a time adjustment will be deferred until completion of the work specified herein. Determination of a commensurate time adjustment will be made in accordance with Section 10-1.13, "PROGRESS SCHEDULE (CRITICAL PATH METHOD)" and Section 10-1.14, "TIME-RELATED OVERHEAD" of the Special Provisions, as well as Section 8-1.07, "LIQUIDATED DAMAGES", of the Standard Specifications.

This change order has concurrence from William Casey (Supervising TE) and Rich Foley (HQ Oversight).

CONTRACT CHANGE ORDER MEMORANDUM

EA: 0120F4 CCO: 369 - 0

DATE: 4/22/2014

Page 2 of 2

CONCURRED BY:			ESTIMATE OF COST										
Construction Engineer:	William Casey, Sup TE	Date 4/14/14	THIS REQUEST										
Bridge Engineer:		Date	ITEMS	\$0.00	TOTAL TO DATE \$0.00								
Project Engineer:		Date	FORCE ACCOUNT	\$900,000.00	\$900,000.00								
Project Manager:		Date	AGREED PRICE	\$0.00	\$0.00								
FHWA Rep.:		Date	ADJUSTMENT	\$0.00	\$0.00								
Environmental:		Date	TOTAL	\$900,000.00	\$900,000.00								
Other (specify):	HQ, Rich Foley	Date 4/16/14	FEDERAL PARTICIPATION										
Other (specify):		Date	<input type="checkbox"/> PARTICIPATING <input type="checkbox"/> PARTICIPATING IN PART <input checked="" type="checkbox"/> NONE <input type="checkbox"/> NON-PARTICIPATING (MAINTENANCE) <input type="checkbox"/> NON-PARTICIPATING										
District Prior Approval By:		Date	FEDERAL SEGREGATION (if more than one Funding Source or P.I.P. type)										
HQ (Issue Approve) By:		Date	<input type="checkbox"/> CCO FUNDED PER CONTRACT <input type="checkbox"/> CCO FUNDED AS FOLLOWS										
Resident Engineer's Signature:		Date	<table border="0"> <tr> <td>FEDERAL FUNDING SOURCE</td> <td>PERCENT</td> </tr> <tr> <td>_____</td> <td>_____</td> </tr> <tr> <td>_____</td> <td>_____</td> </tr> <tr> <td>_____</td> <td>_____</td> </tr> </table>			FEDERAL FUNDING SOURCE	PERCENT	_____	_____	_____	_____	_____	_____
FEDERAL FUNDING SOURCE	PERCENT												
_____	_____												
_____	_____												
_____	_____												